Station of Fate

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

There are n people standing in m stations, forming m queues.

You don't know which person is in which station, or in what order they are standing in queue, so you want to count the number of different **schemes**. Two schemes are considered different, if and only if there exists a station whose queue consists of different people, or has different orders.

Calculate the number of different schemes modulo 998 244 353.

Input

The first line contains an integer T ($1 \le T \le 100$), denoting the number of test cases. Then T test cases follow.

Each test case contains a single line containing two integers n, m ($1 \le m \le n \le 10^5$).

Output

For each test case, output the number of different schemes modulo 998 244 353.

Example

standard input	standard output
2 3 2 6 3	12 7200